

CLAIM AMENDMENTS:

1. (Currently Amended) A tube coupling comprising:

a coupling body having a throughway open at one end ~~to receive a tube~~, at least a portion of the throughway being adapted to receive a tube;

an end cap in screw-threaded engagement with the coupling body to move between initial and advanced positions along the coupling body and having an opening for the tube and an internal tapering cam surface ~~tapering towards the tube opening;~~

a collet at least partially disposed in the end cap engaging the cam surface to lock ~~[[a]] the tube in the cap with movement of the collet outwardly of the cap and to release the tube when depressed inwardly of the cap, and ;~~

stop means in the coupling body ~~to limit~~ for limiting movement of the collet inwardly of the end cap, the initial position of the end cap on the coupling body allowing ~~[[a]] the tube to be inserted and locked in the end cap by the collet and to be released by depressing the collet inwardly of the end cap and the advanced position of the end cap holding the collet adjacent the stop means in the coupling body to prevent release of the tube; and~~

~~characterised in that~~ detent means ~~are provided~~ acting between the end cap and coupling body ~~to provide~~ for providing resistance to movement of the end cap along the coupling body until the end cap reaches said initial position on the coupling body and to allow said further movement of the end cap to the advanced position.

2. (Currently Amended) A tube coupling as claimed in claim 1, wherein the coupling body has an external screw-threaded portion extending along the coupling body from said one end and the end cap has an open mouth to encircle the coupling body and a screw-threaded portion extending from a location adjacent the open mouth internally along the end cap to engage with the screw-threaded portion on the coupling body.

3. (Currently Amended) A tube coupling as claimed in claim 2, wherein the detent means are provided on the coupling body adjacent the end of the screw-thread remote from said open end of the coupling body and within the end cap between the screw-thread and mouth of the end cap.

4. (Currently Amended) A tube coupling as claimed in claim 3, wherein the detent means comprise a flexible diaphragm encircling one of the coupling body and the end cap and an annular slot in the other of the end cap and coupling body in which the diaphragm is snap engaged in said initial position of the end cap on the coupling body, the slot having a width which accommodates the travel of the end cap along the coupling body.

5. (Currently Amended) A tube coupling as claimed in claim 4, wherein the diaphragm is formed on the coupling body and the mouth of the end cap is formed with an inturned lip providing a restricted opening of smaller diameter than the outer diameter of the diaphragm and with [[an]] the annular slot encircling the inner side of the end cap inwardly of the lip into which the annular diaphragm can snap after being deformed as it passes through the annular lip in the mouth of the end cap to define said initial position of the end cap on the coupling body and to hold the diaphragm in a deformed state in engagement with the bottom of the slot to resist withdrawal of the end cap from the coupling body.

6. (Currently Amended) A tube coupling as claimed in claim 4, wherein the annular slot tapers outwardly away from the lip into the end cap so that as the end cap is advanced along the coupling body past the diaphragm, the diaphragm can slide along and expand into the deepening part of the slot to reduce the deformity imposed on the diaphragm.

7. (Currently Amended) A tube coupling as claimed in claim 6, wherein the slot in the end cap at its deeper end has an extended deeper slot into which the diaphragm can extend in the advanced position of the end cap on the coupling body, the additional slot being sufficiently deep to accommodate the diaphragm without deformation.

8. (Currently Amended) A tube coupling as claimed in claim [[1]] 4, wherein the diaphragm is a single continuous diaphragm encircling the coupling body.

9. (Currently Amended) A tube coupling as claimed in claim [[1]] 4, wherein the diaphragm comprises a series of segments extending around the coupling body.

10. (Original) A tube coupling as claimed in claim 4, wherein the annular diaphragm is formed on a separate insert ring mounted on the coupling body.

11. (Original) A tube coupling as claimed in claim 10, wherein the insert ring is a split ring mounted in a groove in the coupling body.

12. (Currently Amended) A tube coupling as claimed in claim 4, wherein the coupling body is formed with an external upstanding annular abutment located beyond the diaphragm from the screw-thread on the coupling body to provide an end stop for restricting the extent to which the end cap can be screwed onto the coupling body to define said advanced position in which the end cap can be screwed to lock [[a]] the tube in the collet.

13. (Currently Amended) A tube coupling as claimed in claim 1, wherein the stop means in the coupling body to restrict movement of the collet when depressed into the coupling body comprise a sealing arrangement located in the coupling body for [[a]] the tube.

14. (Currently Amended) A tube coupling as claimed in claim 13, wherein the sealing arrangement comprises a spacer ring encircling the throughway in the coupling body and an O-ring seal located between the spacer ring and a shoulder formed in the throughway, the inner end of the collet being engageable with the spacer ring to restrict entry of the collet into the coupling body.

15. (New) A tube coupling comprising:

a coupling body having a throughway open at a first end;

a tubular end cap in screw-threaded engagement with the first end of the coupling body, the end cap being selectively movable between an initial position and an advanced position along the coupling body, the end cap having an interior surface comprising a tapering cam surface;

a collet at least partially disposed in the end cap so as to selectively bias against the tapering cam surface of the end cap;

a stop disposed in the coupling body, the stop restricting advancement of the collet into the end cap when the end cap is in the advanced position; and

a flexible diaphragm extending between the coupling body and the end cap.

16. (New) A tube coupling as claimed in claim 15, further comprising:

the flexible diaphragm encircling one of the coupling body and the end cap; and

an annular slot in the other of the end cap and coupling body in which the diaphragm is disposed when the end cap is in the initial position, the slot having a width which accommodates the travel of the end cap along the coupling body.

17. (New) A tube coupling as claimed in claim 16, further comprising:

the diaphragm being formed on the coupling body; and

a lip radially inwardly projecting from the interior surface of the end cap, the lip providing a restricted opening of smaller diameter than an outer diameter of the diaphragm, the annular slot being disposed on the interior surface of the end cap inward of the lip.

18. (New) A tube coupling as claimed in claim 17, wherein the annular slot tapers outwardly away from the lip so that as the end cap is advanced along the coupling body over the diaphragm, the diaphragm can slide along and expand into the slot to reduce the deformity imposed on the diaphragm.

19. (New) A tube coupling as claimed in claim 16, wherein the diaphragm is a single continuous diaphragm encircling the coupling body.

20. (New) A tube coupling as claimed in claim 16, wherein the diaphragm comprises a series of segments extending around the coupling body.